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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,749

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Yoshiharu Tajima

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06/29/2006

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EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/789,749

**Applicant(s)**

TAJIMA, YOSHIHARU

**Examiner**

Sharad Rampuria

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

I. The Art Unit location of this application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

II. The current office-action is in response to the application filed on 04/18/2006.

Accordingly, Claims 1-10 are pending for further examination as follows:

***Claim Rejections - 35 USC § 102***

III. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

IV. Claims 1-10 are rejected under 35 U.S.C. 102 (e) as being anticipated by Dolan [US 6628632].

As per claim 1, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

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A receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22) by each IP layer (e.g. IP; Col.7; 48-55)

An identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors; Col.5; 48-67, Col.7; 48-55, Claim 1; 23-27)

A network interface section for delivering the signal to a network when a local station is not the particular radio base station; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

An inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the terminal via the radio channel. (e.g. At step 434, if the handoff is accepted, the primary controller proceeds to

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step 436 to perform the handoff and then cease supervision of the call at step 438. If at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428; Col.9; 34-54, Claim 1; 28-34)

As per claim 2, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22) by each IP layer (e.g. IP; Col.7; 48-55)

An identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; (e.g. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors; Col.5; 48-67, Col.7; 48-55, Claim 1; 23-27)

A network interface section for delivering the signal to a network when a local station is not the particular radio base station; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary

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controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23) and

An inter-office interface section for forwarding the signal to the particular radio base station when the local station is not the particular radio base station. (e.g. At step 434, if the handoff is accepted, the primary controller proceeds to step 436 to perform the handoff and then cease supervision of the call at step 438. If at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428; Col.9; 34-54, Claim 1; 28-34)

As per claim 3, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A network interface section for capturing a signal that is delivered from a network in a physical layer (Col.7; 48-55) of the network; (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23)

An identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to a terminal as a receiving end of the signal during a process of a

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diversity handover for the terminal; (e.g. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors; Col.5; 48-67, Col.7; 48-55, Claim 1; 23-27) by each IP layer (e.g. IP; Col.7; 48-55)

A transmitting section for transmitting the signal to the terminal via the radio channel; (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22) and

An inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station. (e.g. At step 434, if the handoff is accepted, the primary controller proceeds to step 436 to perform the handoff and then cease supervision of the call at step 438. If at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428; Col.9; 34-54, Claim 1; 28-34)

As per claim 4, Dolan teaches:

A radio base station apparatus (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

An inter-office interface section for capturing a signal whose destination is a terminal and that have been forwarded from a radio base station forming a wireless zone adjacent to a wireless

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zone formed by a local station; (e.g. At step 434, if the handoff is accepted, the primary controller proceeds to step 436 to perform the handoff and then cease supervision of the call at step 438. If at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428; Col.9; 34-54, Claim 1; 28-34)

An identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; (e.g. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors; Col.5; 48-67, Col.7; 48-55, Claim 1; 23-27) by each IP layer (e.g. IP; Col.7; 48-55) and

A transmitting section for transmitting the signal to the terminal via the radio channel when the local station is not the particular radio base station. (e.g. The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320; Col.5; 45-48, Claim 1; 19-22)

As per claim 5, Dolan teaches:

The radio base station apparatus according to claim 1, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller



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performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section combines the received signal with a signal that is forwarded via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 6, Dolan teaches:

The radio base station apparatus according to claim 2, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the particular radio base station, wherein said inter-office interface section forwards the signal to the particular radio base station via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 7, Dolan teaches:

The radio base station apparatus according to claim 3, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section forwards the signal via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 8, Dolan teaches:

The radio base station apparatus according to claim 4, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein said inter-office interface section captures a signal that is forwarded via the link secured by said inter-office link securing section. (Col.7; 48-55)

As per claim 9, Dolan teaches:

A base station controller (100; Fig.2, Col.5; 39-44, Claim 1; 16-18 and Abstract) comprising:

A channel controlling section for performing a channel control over a terminal in cooperation with a radio base station forming a wireless zone where the terminal can visit, and for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, (e.g. The signal quality of a neighboring base station is approximated or derived from the measured pilot channel strength, using methods which are well-known in the art; Col.8; 1-9) the particular radio base station being to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; (e.g. At step 434, if the handoff is accepted, the primary controller proceeds to step 436 to perform the handoff and then cease supervision of the call at step 438. If

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at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428; Col.9; 34-54, Claim 1; 28-34) and

A network interface section for interfacing with a network under the channel control, the network being a network in which a communication channel is to be formed between said base station controller and the terminal via the radio base station. (e.g. In step 404, the primary controller supervises ordinary call processing routines as is known in the art. As a part of the call processing, the primary controller periodically measures the signal quality from the wireless terminal. If signal quality diminishes below a certain point, the call may be terminated or a handoff may be forced, as is known in the art; Col.7; 62-Col.8; 23)

As per claim 10, Dolan teaches:

The base station controller according to claim 9, wherein said channel controlling section performs the channel control such that a radio base station is to be the particular radio base station, the radio base station forming a wireless zone in which the diversity handover is done in a suitable manner for all or part of configuration of a wireless zone, channel allocation, and frequency allocation. (e.g. The signal quality of a neighboring base station is approximated or derived from the measured pilot channel strength, using methods which are well-known in the art; Col.8; 1-9)

***Response to Amendments & Arguments***

***V. Applicant's arguments filed on 4/18/2006 have been fully considered but they are not persuasive.***

As per claim 1, in response to Applicant's argument that Dolan doesn't teach, "A receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal by each IP layer; An identifying section for identifying a particular radio base station, which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal; A network interface section for delivering the signal to a network when a local station is not the particular radio base station; and An inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the terminal via the radio channel;" it is noted that Dolan supports the assertion as, The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors. The transceiver 340 is also connected to a transceiver controller 342 for purposes of

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control of transceiver activities. Transceiver controller 342 is connected to the exemplary CPU 360 for purposes of coordination of transceiver activities either directly or via transceiver 340. The transceiver controller 342 and transceiver 340 make up a base transceiver station (BTS) 310. The base station controller 300 acts to receive (and potentially store in memory 380) information including identity and addresses of first, second, third, . . . , nth order neighboring base stations, to receive (and potentially store) signal quality measurements of neighboring base stations, and to establish direct connections with nth order neighbors using the received identity and address information to initiate handoffs to the nth order neighbors. (Please perceive col.5; lines 45-67) Therefore Dolan explained as above the handover based on the identity (e.g. IP address see Col.7; 48-55) and address of the neighboring base stations which is different or divert base stations. Hence, it is believed that *Dolan still teaches the claimed limitations*.

The above arguments also recites for the claims 2-4, consequently the response is the same explanation as set forth above with regard to claim 1.

With the intention of that explanation, it is believed and as enlighten above, the refutation are sustained.

As per claim 9, in response to Applicant's argument that Dolan doesn't teach, "A channel controlling section for performing a channel control over a terminal in cooperation with a radio base station forming a wireless zone where the terminal can visit, and for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, the particular radio base station being to maintain a radio channel assigned to the terminal during a process of a diversity

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handover for the terminal.” it is noted that Dolan supports the assertion as, The base station controller includes a transceiver 340 for receiving signals from and transmitting signals to antenna 320. The transceiver 340 is connected to a processor such as a CPU 360 for example, which is in turn connected to memory 380. The CPU 360 is further connected to a CPU 360a of a neighboring base station 101, for example. Once identity and address of nth order neighbors is known, a similar direct connection can be established between CPU 360 and the CPU of the nth order neighbors. The transceiver 340 is also connected to a transceiver controller 342 for purposes of control of transceiver activities. Transceiver controller 342 is connected to the exemplary CPU 360 for purposes of coordination of transceiver activities either directly or via transceiver 340. The transceiver controller 342 and transceiver 340 make up a base transceiver station (BTS) 310. The base station controller 300 acts to receive (and potentially store in memory 380) information including identity and addresses of first, second, third, . . . , nth order neighboring base stations, to receive (and potentially store) signal quality measurements of neighboring base stations, and to establish direct connections with nth order neighbors using the received identity and address information to initiate handoffs to the nth order neighbors. (Please perceive col.5; lines 45-67) Also see “The signal quality of a neighboring base station is approximated or derived from the measured pilot channel strength, using methods which are well-known in the art;” Col.8; 1-9 and “At step 434, if the handoff is accepted, the primary controller proceeds to step 436 to perform the handoff and then cease supervision of the call at step 438. If at step 434, the handoff was not accepted by the candidate base station, the primary controller determines at step 440 whether other semi-soft handoff candidates exist. If such other candidates exist, the primary controller proceeds to step 428;” Col.9; 34-54, Claim 1; 28-34)

Therefore Dolan explained as above the handover based on the identity (e.g. IP address see Col.7; 48-55) and address of the neighboring base stations which is different or divert base stations. Hence, it is believed that *Dolan still teaches the claimed limitations*.

With the intention of that explanation, it is believed and as enlighten above, the refutation are sustained.

### ***Conclusion***

**VI. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870. The examiner can normally be reached on M-F. (8:30-5).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or [EBC@uspto.gov](mailto:EBC@uspto.gov).

Sharad Rampuria  
Examiner  
Art Unit 2617

  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER